

In the Claims:

Please cancel without prejudice claims 1 to 18 and add the following claims 19 to 36:

19. A shaping tool (1) with a structured surface for creating structures in glass (2), said shaping tool comprising

a rolling cylinder (3) comprising a metal shaping sheet (8) and a metal hollow cylinder (7), said metal hollow cylinder having end faces on opposite ends thereof and an outer surface extending between said end faces, and wherein said metal shaping sheet (8) is provided with structuring recesses (8a) corresponding to said structures in said glass and is in an intimate large-area contact with said outer surface of said metal hollow cylinder;

a shaft (5) for continuously driving the rolling cylinder (3), said shaft extending through the metal hollow cylinder (7);

two drivers (4) fixedly mounted on the shaft (5) at the end faces of the metal hollow cylinder (7) and in positive operative engagement with the metal hollow cylinder (7); and

an electric heater (6) for local heating of said glass, which is arranged in electrically insulated fashion between the shaft (5) and the metal hollow cylinder (6), with additional thermal insulation of the electric heater from the shaft.

20. The shaping tool as defined in claim 19, wherein the metal hollow cylinder (7) comprises nickel wrought alloy.
21. The shaping tool as defined in claim 19, wherein the shaping sheet (8) comprises a wear-resistant, microstructurable, heat-conducting material that does not adhere to said glass.
22. The shaping tool as defined in claim 21, wherein said shaping sheet (8) comprises at least one member selected from the group consisting of PtAu5 alloy, a pure PtAu5 material and an oxide-dispersed PtAu5 material.
23. The shaping tool as defined in claim 21, wherein said shaping sheet (8) comprises a foundation material with a coating applied thereon.
24. The shaping tool as defined in claim 19, made by large-area diffusion welding of said shaping sheet (8) to the metal hollow cylinder (7).
25. The shaping tool as defined in claim 19, wherein said structuring recesses (8a) in the shaping sheet (8) are formed with a diamond tool by precision turning with the diamond tool.
26. The shaping tool as defined in claim 19, wherein each of said drivers (4) have at least three symmetrically distributed trapezoidal claws (4a), said rolling

cylinder (3) is provided with trapezoidal grooves (3a) on opposite ends of the rolling cylinder (3) and said trapezoidal grooves (3a) are complimentary to said trapezoidal claws (4a) so that said trapezoidal claws (4a) are in mutual operative engagement with the trapezoidal grooves (3a).

27. The shaping tool as defined in claim 26, wherein said drivers (4) have axial slits (4b) on respective ends of said drivers closest to the rolling cylinder (3) in order to minimize electrical coupling.

28. The shaping tool as defined in claim 19, wherein said shaft (5) is a hollow shaft, and further comprising locating-non-locating bearings (12, 13) with pre-stressed spindle bearings, said shaft (5) being mounted in said locating-non-locating bearings (12, 13).

29. The shaping tool as defined in claim 19, wherein said drivers (4) and said shaft (5) are braced together axially like a tie rod arrangement by a shaft nut (10) and a cup spring (11).

30. The shaping tool as defined in claim 28, wherein said shaft (5) has a plurality of longitudinal slits (5a) distributed uniformly over a circumference of said shaft (5).

31. The shaping tool as defined in claim 19, further comprising a ceramic cylinder (14) slipped onto said shaft (5) to thermally insulate said shaft (5), said ceramic cylinder being secured on said shaft (5) against relative rotation about said shaft, and said electric heater (6) comprising an electrically heatable conductor (6c) for generating heat, said conductor is received on an outer surface of said ceramic cylinder, and further comprising a quartz glass tube (15) for electrical insulation of the conductor (6c) from the metallic hollow cylinder (3), said quartz glass tube (15) being slipped over said ceramic cylinder (14) with said conductor (6c) arranged thereon.

32. The shaping tool as defined in claim 31, wherein said conductor (6c) of said electric heater (6) is a PtRh10 strip and said ceramic cylinder (14) is provided with conductor grooves (14a) into which said conductor (6c) is arranged or wound.

33. The shaping tool as defined in claim 19, further comprising a slip ring assembly (16) on the shaft (5), and wherein said slip ring assembly comprises means for supplying electrical energy to the electric heater (6).

34. The shaping tool as defined in claim 19, wherein said shaft (5) is a hollow shaft, and further comprising at least one ceramic tube (17) arranged in said hollow shaft for supplying cooling air to an interior of the hollow shaft.

35. The shaping tool as defined in claim 19, wherein said shaft (5) is a hollow shaft, and further comprising a thermocouple (18) installed in an interior of the hollow shaft.

36. A method for making precision structures in a channel plate for a flat screen, said method comprising the steps of:

- a) providing a shaping tool said shaping tool comprising a rolling cylinder (3) comprising a metal shaping sheet (8) and a metal hollow cylinder (7), said metal hollow cylinder having end faces on opposite ends thereof and an outer surface extending between said end faces and said metal shaping sheet (8) being provided with structuring recesses (8a) according to said structures to be produced in said glass and being in an intimate large-area contact with said outer surface of said metal hollow cylinder; a shaft (5) for continuously driving the rolling cylinder (3), said shaft extending through the metal hollow cylinder (7); two drivers (4) fixedly mounted on the shaft (5) at the end faces of the metal hollow cylinder (7) and in positive operative engagement with the metal hollow cylinder (7); and an electric heater (6) for local heating of said glass, which is arranged in electrically insulated fashion between the shaft (5) and the metal hollow cylinder (6), with additional thermal insulation of the electric heater from the shaft; and
- b) forming said precision structures in said channel plate with said shaping tool.